

AMENDMENTS TO THE SPECIFICATION:

Page 1, before the first full paragraph "The present invention relates ..." insert the header

BACKGROUND OF THE INVENTION

Page 2, before the first full paragraph "The primary object ..." insert the header

SUMMARY OF THE INVENTION

Page 8, before the first full paragraph "The invention will be better ..." insert the header

BRIEF DESCRIPTION OF THE DRAWINGS

Page 9, before the first full paragraph "Figure 1 represents ..." insert the header

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

Replace the paragraph bridging pages 24-25 with the amended paragraph as follows:

The corresponding measurement signals 40 are converted into the frequential domain by Fourier transformation.

b) for the same reference tyre-wheel assembly 26 and the same rolling conditions, measurements are made of the efforts at the wheel centre using a dynamometric tool 27 with a fixed support, similar to the tool represented in figure 1. The same test drum 28 provided with the same obstacle is activated under the same conditions as in step a). The corresponding measurement signals F^{SF} are converted into the frequential domain by Fourier transformation.

c) determination is carried out of the passage matrix H_R , which is assumed to be diagonal, corresponding to the ground contact system constituted by the suspension or wheel support 30 and the reference tyre-wheel assembly 26, after having measured the necessary parameters.

d) in the step 31, there is calculation of the product of this passage matrix by means of the fixed support efforts measured in step b), which provides an estimation F^{ss} of the efforts actually transmitted between the reference tyre-wheel assembly 26 and its wheel support 30 in the vehicle ground contact system 25.

e) in the step 32, transfer function calculations are carried out, by calculation of coherence between the signals recorded in the passenger space in step a) and the efforts calculated in step d), all in the frequential domain, which expresses the ratio between the vibratory and acoustic levels recorded in the passenger space and the efforts transmitted between the front right wheel and its support at the wheel centre, which efforts give rise to these vibratory and acoustic levels. These calculations are carried out using conventional signal processing tools, for example the software with the brand name Matlab or LMS. This transfer function, which is schematised by the block 34, characterises the aptitude of the body 33 and the suspension 30 of the vehicle 25 to transmit vibrations between the front right wheel support and the passenger space, independently from the tyre-wheel assembly which is attached to it. In practice, this transfer function has as many components as there are different signals measured in step a). The transfer function calculation is in itself well-known in the state of the art: schematically, it involves division of different inter-spectra and auto-spectra between one another.